

DTIC FILE COPY

AD A117137

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DR-1242
20 May 82

AD A117137

(12)

METEOROLOGICAL DATA REPORT

14823A LANCE,
Missile Number 5358,
Round Number 378-AST.
20 May 1982

by

DONALD C. KELLER
Program Support Coordinator
Phone Number (505) 679-9568
AVN Number 349-9568

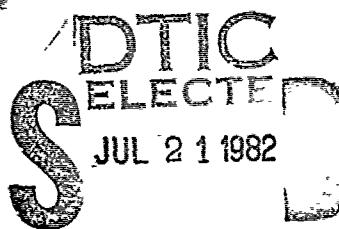
Copy available to DTIC does not
permit fully legible reproduction

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

82 07 21 007



DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

DISCLAIMER NOTICE

**THIS DOCUMENT IS BEST QUALITY
PRACTICABLE. THE COPY FURNISHED
TO DTIC CONTAINED A SIGNIFICANT
NUMBER OF PAGES WHICH DO NOT
REPRODUCE LEGIBLY.**

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1242	2. GOVT ACCESSION NO. AD-A117137	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 14823A LANCE Missile Number 5358 Round Number 378-AST	5. TYPE OF REPORT & PERIOD COVERED	
	6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s) White Sands Meteorological Team	8. CONTRACT OR GRANT NUMBER(s) DA Task 1F665702D127-02	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002	12. REPORT DATE 20 May 1982	13. NUMBER OF PAGES 32
14. MONITORING AGENCY NAME & ADDRESS (If different from Controlling Office) US Army Electronics Research and Development Cmd Adelphi, MD 20783	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, If different from Report)	Approved for public release; distribution unlimited	
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)	Meteorological data gathered for the launching of the 14823A LANCE, Missile Number 5358, Round Number 378-AST are presented in tabular form.	

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

CONTENTS	PAGE
INTRODUCTION-----	1
DISCUSSION-----	1
GENERAL AREA MAP-----	2
TABLES	
1. Surface Observation Taken at 0910 MDT at LC-39-----	3
2. LC-36 pilot-balloon Measured Wind Data at 0900 MDT-----	4
3. LC-36 pilot-balloon Measured Wind Data at 0910 MDT-----	5
4. WSD, APACHE and HOLLOWMAN Computer Met Messages-----	6
5. WSD Significant Level Data at 0900 MDT-----	7
6. WSD Upper Air Data at 0900 MDT-----	8
7. WSD Mandatory Levels at 0900 MDT-----	13
8. APACHE Significant Level Data at 0800 MDT-----	14
9. APACHE Upper Air Data at 0800 MDT-----	15
10. APACHE Mandatory Levels at 0800 MDT-----	20
11. HOLLOWMAN Significant Level Data at 0900 MDT-----	21
12. HOLLOWMAN Upper Air Data at 0900 MDT-----	23
13. HOLLOWMAN Mandatory Levels at 0900 MDT-----	28

Accession For		
NTIS	GRA&I	<input checked="" type="checkbox"/>
DTIC	TAB	<input type="checkbox"/>
Unannounced		<input type="checkbox"/>
Justification		
By		
Distribution/		
Availability Codes		
Dist	Avail	Ref/
	Spec	Ref
A		B

DTIC
COPY
INSPECTED
2

INTRODUCTION

14823A LANCE, Missile Number 5358, Round Number 378-AST, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 0910:03 MDT, 20 May 1982. The scheduled launch time was 0900 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-39 Met Site at t-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observers at:

SITE AND ALTITUDE

LC-36 3360 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

WSD 0900 MDT (Launch Area Data)
APACHE 0800 MDT (Mid-Course Data)
HOLLOWMAN 0900 MDT (Impact Area Data)

WSMR METEOROLOGICAL SITES

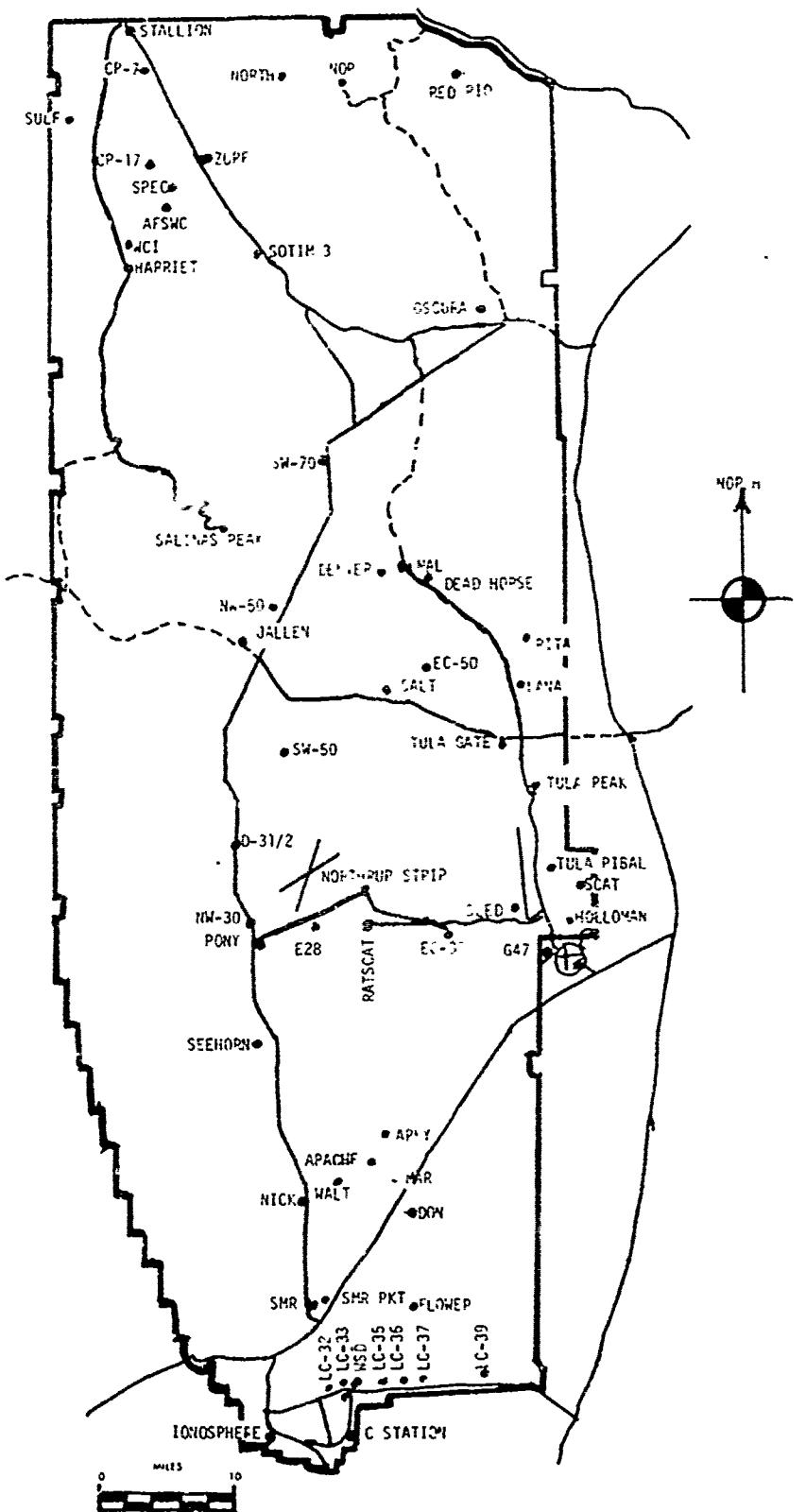


TABLE I

卷之三

STATICS LC-39

$$Y = 530,938.82 \quad Y = \underline{186,564.96} \quad H = \underline{4063.75}$$

卷之三

STATION LC-39						
DATE 20		TIME 0910		WEATHER		
YEAR	MONTH	YEAR	MONTH	TEMPERATURE °C	RELATIVE HUMIDITY %	VISIBILITY MILES
82	MAY	82	MAY	25.1	0.7	20
0910	875.9					

٢٣٦

PSYCHOPEDAGOGIC CONSULTATION

TIME:	09:10
DET. SULB TENS.	25.1
DET. SULB TENS.	11.9
DET. SULB DEPR.	13.2
DET. POINT	0.7
RELATIVE HUMID.	20%

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM LC-36

DATE 20 May 82

TIME 0900 MDT

COORDINATES (WSTM) X = 504,466.00 Y = 190,782.16 H = 4037.21

NOTE: WIND DIRECTIONS ARE REFERENCED TO

HEIGHTS ARE METERS AGL X OR FEET AGL

WEIGHT ACL	DIRECTION DEGREES	SPEED KNOTS
50		CALM
120	062	05
180	106	08
240	085	07
300	058	70
360	045	08
420	047	09
480	031	09
540	012	10
600	348	12
660	341	13
720	338	13
780	329	13
840	320	12
900	314	13
960	310	16
1020	309	17
1080	306	16
1140	302	18
1200	298	20
1260	300	20
1320	297	19
1380	292	20
1440	290	24
1500	290	25
1560	293	23
1620	289	24
1680	286	27
1740	285	31

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	282	32
1860	280	30
1920	279	30
1980	278	29
2040	272	29
2100	272	26
2160	271	24
2220	265	25
2280	260	25
2340	256	23
2400	256	21
2460	257	23
2520	255	25
2580	252	25
2640	253	26
2700	250	27
2760	248	28
2820	247	28
2880	246	28
2940	246	28
3000	242	28
3060	240	30
3120	240	30
3180	234	30
3240	235	29
3300	243	26
3360	244	24
3420	243	24
3480	240	23
3540	234	21

PILOT BALLOON MEASURED WIND DATA

TABLE 3RELEASED FROM LC-36 DATE 20 May 82 TIME 0910 MDTCOORDINATES (WSTM) X=504,466.00 Y=190,782.16 U=4037.21HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
sfc		CALM	1800	285	29	3600	243	24
60		CALM	1860	284	30	3660	245	22
120	064	03	1920	282	31			
180	089	06	1980	281	31			
240	066	07	2040	279	28			
300	028	08	2100	275	28			
360	018	10	2160	273	28			
420	013	10	2220	270	26			
480	360	10	2280	266	26			
540	351	11	2340	265	26			
600	346	09	2400	265	26			
660	339	09	2460	261	28			
720	333	11	2520	253	29			
780	314	11	2580	250	28			
840	305	12	2640	250	27			
900	310	12	2700	247	26			
960	303	13	2760	249	27			
1020	299	14	2820	254	27			
1080	295	15	2880	251	29			
1140	293	14	2940	245	30			
1200	293	14	3000	244	29			
1260	292	18	3060	243	27			
1320	292	18	3120	239	26			
1380	291	19	3180	235	27			
1440	290	21	3240	232	28			
1500	291	21	3300	230	26			
1560	290	22	3360	233	27			
1620	290	25	3420	235	24			
1680	288	27	3480	239	24			
1740	284	28	3540	243	27			

TABLE-4

COMPUTER MET MESSAGES
20 May 1982

WSD 0900 MDT	APACHE 0800 MDT	HOLLOWAY 0900 MDT
METCM1324064	METCM1326064	METCM1329061
201500122880	201400121875	201500126875
00000000 29820880	00640004 29380880	00640008 29560875
01110006 29710870	01125012 29380869	01033008 29630865
02012006 29450845	02596018 29310845	02615010 29400840
03559011 29090806	03564017 28980806	03597011 29090802
04521020 28660760	04521022 28560760	04544018 28610756
05495021 28310716	05503026 28230715	05503020 28140712
06456021 28050674	06482018 27940673	06488021 27790670
07439025 27640634	07553013 27550633	07430021 27530630
08405025 27280596	08389034 27170595	08421023 27200592
09427020 26940560	09444022 26840558	09477018 27020556
10482015 26660525	10470020 26600524	10509017 26620521
11624017 26390492	11480021 26250491	11495017 26220489
12492013 25810446	12513019 25660445	12462011 25620443
13493012 24930390	13502016 24870389	13479013 24740387
14473012 24090340	14469011 24010338	14479010 23860336
15487013 23250294	15487013 23210293	15483016 23020291
16504021 22490254	16500023 22410252	16507026 22250250
17499020 21820217	17509029 21800216	17498029 21760214
18475034 21520186	18478030 21430185	18476027 21570183
19453019 21450159	19450026 21410158	19447018 21320156
20479021 21190135	20473020 20990134	20487017 20960133
21461023 21230115	21491028 21030114	21466027 21040113
22518008 21010098	22500022 20920097	22470009 20930096
23346008 21040084	23251010 20870083	23355014 21040082
24417010 21350071	24326008 21090070	24196005 21360070
25160008 21570061	25125007 21490060	25164012 21430060
26173022 21680052	26202010 21570051	26234007 21610051

STATION ALTITUDE 3989.00 FEET ASL
20 MAY 02 0900 MDT
ASCENSUS 140. 223

SIGNIFICANT LEVEL DATA
14000 FEET
WHITE STATION
TABLE -5

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG UTG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEPTH IN FEET	TEMPERATURE AIR DEPTH IN FEET
DEGREES CENTIGRADE	DEGREES CENTIGRADE	DEGREES CENTIGRADE
879.0 3989.0	24.5 -3.0	15.0
850.0 4965.4	21.2 -5.0	16.0
797.4 6762.0	16.2 -7.0	19.0
722.4 9482.6	9.1 -10.9	23.0
700.0 10339.9	9.6 -10.5	14.0
614.6 13829.2	.9 -22.0	15.0
580.4 15332.4	-2.1 -25.9	14.0
546.4 16899.2	-5.4 -27.2	16.0
500.0 19175.3	-8.5 -31.1	14.0
450.6 21798.2	-14.5 -35.3	15.0
400.0 24721.7	-22.5 -41.3	16.0
336.8 28790.2	-33.0 -50.1	16.0
300.0 31431.7	-39.0 -55.3	17.0
250.0 35453.7	-49.1	
200.0 40177.9	-58.4	
176.8 42739.2	-57.5	
150.0 46148.7	-59.2	
133.2 48586.6	-62.1	
118.0 51068.2	-60.2	
100.0 54448.6	-63.4	
80.6 58771.4	-63.4	
79.6 59077.3	-60.1	
70.0 61726.4	-59.9	
63.4 63781.6	-57.3	
56.0 65640.5	-57.3	
50.0 68750.0	-56.0	
35.2 76186.6	-52.6	
30.0 79629.5	-49.0	
20.0 88515.1	-45.1	
16.4 92931.3	-42.3	
14.5 95718.9	-37.3	

STATION ALTITUDE 3989.00 FEET MSL
20 MAY 1952 0900 MDT
ASCENSION 1.0. 223

UPPER AIR WIND
WHITE SMOKE
TABLE-6

UPPER AIR WIND
32.40043 LAT. DEG
106.37033 LONG. DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY OF CUBIC METER	INDEX OF REFRACTION
3989.0	879.6	-24.5	-3.8	15.0	1.027.4
4000.0	879.3	-24.5	-3.8	15.0	1.027.4
4500.0	864.0	-22.8	-1.7	15.5	1.015.2
5000.0	849.0	-21.1	-5.6	16.1	1.003.3
5500.0	834.0	-19.7	-6.1	16.9	0.990.3
6000.0	819.3	-18.3	-6.6	17.7	0.977.3
6500.0	804.9	-16.9	-7.1	18.6	0.965.0
7000.0	790.5	-15.6	-7.7	19.3	0.952.3
7500.0	776.3	-14.3	-9.3	20.1	0.939.4
8000.0	762.4	-13.0	-8.9	20.8	0.920.8
8500.0	748.6	-11.7	-9.6	21.6	0.914.3
9000.0	735.2	-10.4	-10.2	22.3	0.904.0
9500.0	721.9	-9.1	-11.0	22.8	0.889.8
10000.0	708.8	-9.4	-14.0	17.6	0.872.9
10500.0	695.8	-9.2	-16.8	14.0	0.857.8
11000.0	683.0	-8.0	-17.7	14.2	0.845.7
11500.0	670.4	-6.7	-18.6	14.3	0.833.8
12000.0	658.0	-5.5	-19.5	14.5	0.822.1
12500.0	645.8	-4.2	-20.4	14.6	0.810.8
13000.0	633.9	-3.0	-21.3	14.8	0.799.2
13500.0	622.2	-1.7	-22.2	14.9	0.789.1
14000.0	610.6	-0.6	-23.1	14.9	0.779.7
14500.0	599.1	-0.4	-24.2	14.6	0.764.9
15000.0	587.8	-1.4	-25.2	14.2	0.753.4
15500.0	576.7	-2.5	-26.1	14.2	0.742.3
16000.0	565.7	-3.5	-26.4	14.9	0.731.8
16500.0	554.9	-4.5	-26.8	15.5	0.720.7
17000.0	544.3	-5.5	-27.4	15.9	0.708.5
17500.0	533.7	-6.2	-28.2	15.5	0.696.3
18000.0	523.4	-0.9	-29.1	15.0	0.684.0
18500.0	512.3	-7.6	-30.0	14.6	0.673.1
19000.0	502.4	-8.3	-30.8	14.2	0.661.9
19500.0	492.6	-9.2	-31.6	14.1	0.651.4
20000.0	482.9	-10.4	-32.4	14.3	0.641.4
20500.0	474.4	-11.5	-33.2	14.5	0.631.9
21000.0	465.1	-12.7	-34.0	14.7	0.621.9
21500.0	456.6	-13.8	-34.8	14.9	0.612.3
22000.0	446.9	-15.1	-35.7	15.1	0.602.1
22500.0	437.9	-16.4	-36.8	15.2	0.594.1
23000.0	429.1	-17.8	-37.8	15.4	0.585.2

STATION AL1110E 3489.00 FET MSL
20 MAY 12 0900 MDT
ASCENSION 10.0. 223

TABLE-6 cont'd

GEODETIC ALTITUDE HSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	AIR JEWPOINT DEGREES	MIN. DATA		INDEX OF REFRACTION
					DENSIT. G/M ³	DIR. EQU. I.F. METER	
23560.0	420.4	-19.2	15.6	-38.8	570.2	20.0	1.00112
24000.0	411.9	-20.5	15.8	-39.8	568.0	19.3	1.00115
24500.0	403.6	-21.9	15.9	-40.9	559.5	17.0	1.00115
25000.0	395.3	-23.2	16.0	-41.9	550.9	16.9	1.00115
25500.0	387.1	-24.5	16.0	-43.0	542.2	14.3	1.00115
26000.0	378.0	-25.8	16.0	-44.1	533.7	12.7	1.00112
26500.0	371.0	-27.1	16.0	-45.2	525.4	11.1	1.00112
27000.0	363.3	-28.4	16.0	-46.2	517.0	9.5	1.00111
27500.0	355.7	-29.7	16.0	-47.3	508.9	7.4	1.00114
28000.0	348.2	-31.0	16.0	-48.4	500.9	0.0	1.00112
28500.0	341.0	-32.3	16.0	-49.5	493.0	-0.7	1.00110
29000.0	333.7	-33.5	16.0	-50.5	485.2	-1.1	1.00108
29500.0	326.5	-34.8	16.3	-51.5	477.2	-1.4	1.00107
30000.0	319.4	-36.1	16.5	-52.5	469.4	-3.0	1.00105
30500.0	312.5	-37.4	16.6	-53.5	461.6	-5.2	1.00103
31000.0	305.7	-38.7	16.8	-54.5	454.2	-5.5	1.00101
31500.0	299.1	-40.0	16.6	-55.6	446.8	-4.9	1.00100
32000.0	292.4	-41.1	14.6*	-57.7	438.9	-3.4	1.00098
32500.0	285.8	-42.3	12.5**	-59.8	431.4	-2.0	1.00096
33000.0	279.4	-43.4	10.4**	-62.2	425.7	-0.2	1.00094
33500.0	273.2	-44.6	8.3**	-64.8	419.3	0.3	1.00093
34000.0	267.0	-45.7	6.1**	-67.8	409.1	0.7	1.00091
34500.0	261.0	-46.9	4.0**	-71.6	401.9	1.4	1.00089
35000.0	255.2	-48.1	1.9**	-77.3	394.9	4.5	1.00088
35500.0	249.5	-49.2			386.0	9.0	1.00087
36000.0	243.6	-50.2			380.0	17.7	1.00086
36500.0	237.9	-51.2			373.4	30.0	1.00085
37000.0	232.4	-52.1			366.3	57.0	1.00084
37500.0	227.0	-53.1			359.4	77.9	1.00083
38000.0	221.7	-54.1			352.0	97.0	1.00082
38500.0	216.5	-55.1			345.9	115.0	1.00081
39000.0	211.4	-56.1			339.3	124.0	1.00080
39500.0	206.5	-57.1			332.9	132.0	1.00079
40000.0	201.7	-58.0			326.6	141.4	1.00078
40500.0	196.9	-58.3			319.3	151.1	1.00077
41000.0	192.2	-58.1			311.4	161.3	1.00076
41500.0	187.7	-57.9			303.8	171.5	1.00075
42000.0	183.2	-57.8			296.3	181.0	1.00074
42500.0	178.8	-57.6			289.0	191.6	1.00073
43000.0	174.6	-57.4			282.7	201.2	1.00072

*** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE HAS BEEN INPUT

STATION ALTITUDE 5489.0 FEET MSL
20 MAY 02 0900 MDT
ASCESSION NO. 223

UPPER AIR DATA
140000Z
WHITE SANDS

UTM COORDINATE:
32.4445 LAT DEG
106.3703 LONG

TABLE-6 cont'd

GEOMETRIC ALTITUDE HSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL.HUM. PERCENT	DEENSITY GM/CUBIC METER	WIND DATA WIND DIRECTION WIND VELOCITY MOTS	INSTR REFRACTION
43500.0	170.4	-57.9	275.8	574.6	255.4	23.5
44000.0	169.4	-58.1	269.5	571.3	253.5	23.3
44500.0	162.4	-58.4	263.4	570.9	255.4	22.8
45000.0	150.5	-58.6	257.5	570.0	250.6	22.3
45500.0	154.8	-58.9	251.0	570.3	261.6	21.3
46000.0	151.1	-59.1	245.9	569.9	267.3	20.4
46500.0	147.5	-59.6	240.6	569.3	272.2	20.4
47000.0	142.9	-60.2	235.4	569.5	275.3	20.6
47500.0	140.4	-60.8	230.4	567.7	277.6	21.1
48000.0	137.1	-61.4	225.5	569.4	270.4	20.7
48500.0	135.8	-62.0	220.7	566.1	262.6	20.7
49000.0	130.5	-61.6	215.4	566.4	250.4	21.2
49500.0	127.4	-61.4	209.0	566.9	250.7	21.9
50000.0	124.3	-61.0	204.2	567.4	247.5	22.7
50500.0	121.3	-60.6	199.9	567.9	252.9	23.1
51000.0	119.4	-60.3	195.7	568.4	248.1	23.7
51500.0	115.5	-60.6	189.4	569.0	262.4	24.0
52000.0	112.7	-61.1	185.2	567.3	265.9	24.0
52500.0	110.0	-61.6	181.1	566.7	269.1	22.5
53000.0	107.4	-62.0	177.1	566.1	272.5	18.7
53500.0	104.8	-62.5	173.2	566.4	277.6	15.1
54000.0	102.2	-63.0	169.4	564.0	287.4	11.9
54500.0	99.7	-63.4	165.7	564.6	302.7	9.3
55000.0	97.3	-63.4	161.0	564.2	302.3	7.8
55500.0	94.9	-63.4	157.7	564.2	300.6	6.3
56000.0	92.6	-63.4	153.9	564.2	291.4	4.3
56500.0	90.4	-63.4	150.1	564.2	280.4	2.3
57000.0	88.0	-63.4	146.4	564.2	184.7	3.1
57500.0	86.0	-63.4	142.9	564.2	180.4	5.5
58000.0	83.9	-63.4	139.4	564.2	169.4	7.9
58500.0	81.9	-63.4	135.0	564.2	188.1	9.9
59000.0	79.9	-60.9	131.2	567.5	188.3	11.3
59500.0	78.0	-60.1	127.5	568.7	169.4	12.3
60000.0	76.1	-60.0	124.4	569.7	170.1	11.0
60500.0	74.3	-60.0	121.4	569.8	204.5	9.9
61000.0	72.5	-60.0	118.5	569.8	220.5	9.6
61500.0	70.8	-59.9	115.9	569.9	240.4	11.1
62000.0	69.1	-59.6	112.7	569.4	220.4	13.0
62500.0	67.4	-58.9	109.7	570.2	14.1	14.1
63000.0	65.8	-58.3	105.7	571.1	207.1	15.2

STATION ALTITUDE 3,889.0 FT. MSL
20 MAY 12 0900 MDT
ASCENDS 140. 223 0900 MDT

UPPER AIR DATA
140 CONC. S.
WHITE BANDS

UTLILIC COORDINATES
32.4045 LAT DEG
106.37033 LON DEG

TABLE-6 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. AIR DECENT	DESIRED DECENT	INDEX OF REFRACTION
65500.0	64.3	-17.7	103.9	371.9	15.2
64000.0	62.7	-17.3	101.3	372.4	15.3
64500.0	61.3	-17.3	98.9	372.4	.8
65000.0	59.8	-17.3	96.5	372.4	1.000021
65500.0	58.4	-17.3	94.2	372.4	1.000021
66000.0	57.0	-17.1	92.0	372.0	1.000020
66500.0	55.7	-16.9	89.7	372.0	1.000020
67000.0	54.4	-16.7	87.5	373.1	35.0
67500.0	53.1	-16.5	85.3	373.4	19.4
68000.0	51.8	-16.3	83.3	373.7	11.2
68500.0	50.6	-16.1	81.4	372.9	9.0
69000.0	49.4	-15.9	79.2	374.2	7.3
69500.0	48.3	-15.7	77.3	374.5	5.3
70000.0	47.1	-15.4	75.4	374.8	4.0
70500.0	46.0	-15.2	73.6	375.1	3.1
71000.0	45.0	-15.0	71.8	375.4	1.000016
71500.0	43.9	-14.7	70.0	375.7	2.3
72000.0	42.9	-14.5	68.3	376.0	2.3
72500.0	41.9	-14.3	66.7	376.3	1.000015
73000.0	40.9	-14.1	65.1	376.6	2.5
73500.0	40.0	-13.8	63.5	376.9	1.000014
74000.0	39.0	-13.6	61.9	377.2	1.000014
74500.0	38.1	-13.4	60.4	377.5	3.3
75000.0	37.2	-13.1	58.9	377.8	4.1
75500.0	36.4	-12.9	57.5	378.0	1.000013
76000.0	35.5	-12.7	56.1	378.2	3.6
76500.0	34.7	-12.5	54.7	379.0	2.7
77000.0	33.9	-12.3	53.3	379.7	1.7
77500.0	33.1	-12.1	52.0	380.4	1.000012
78000.0	32.4	-12.0	50.7	381.0	4.8
78500.0	31.6	-12.0	49.4	381.7	1.000011
79000.0	30.9	-11.7	48.1	382.4	1.000011
79500.0	30.2	-11.2	46.9	383.1	1.000010
60000.0	29.5	-10.8	45.6	383.8	13.9
60500.0	28.8	-10.6	44.7	384.0	1.000010
61000.0	28.2	-10.2	43.7	384.3	15.3
61500.0	27.5	-9.8	42.7	384.5	15.6
62000.0	26.9	-9.8	41.7	384.6	15.9
62500.0	26.3	-9.7	40.7	384.9	15.9
63000.0	25.7	-9.5	39.7	385.2	15.9

STATION ALTITUDE 3,890.0 FEET - SL
20 MAY 02
ASSEMBLY NO. 225

UPPER AIR DATA
1400Z 02 MAY
WEATHER STATION
TABLE-6 cont'd

DECODED COORDINATES
32.40043 LAT ECE
106.37033 LONG ECE

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	CONC. SUGAR MILLIGRAMS LITER	REL.HUM. SWEAT MILLIGRAMS LITER	WIND DIRECTION DEGREES (16) SHOTS	WIND SPEED METERS/SEC.	INDEX REFRACTION
83500.0	25.1	-7.3	38.0	58.5	207.0	15.9	1.000009	
84000.0	24.6	-7.1	37.9	58.6	207.0	15.9	1.000008	
84500.0	24.0	-6.9	37.0	58.0	207.0	15.9	1.000008	
85000.0	23.5	-6.6	36.1	58.3	207.0	15.9	1.000008	
85500.0	22.9	-6.4	35.3	58.6	206.7	12.4	1.000008	
86000.0	22.4	-6.2	34.4	58.9	206.4	3.7	1.000008	
86500.0	21.9	-6.0	33.6	587.2	89.4	19.8	1.000007	
87000.0	21.4	-5.8	32.8	587.2	88.7	36.0	1.000007	
87500.0	20.9	-5.5	32.1	587.7	89.4	41.5	1.000007	
88000.0	20.5	-5.3	31.3	588.0	90.1	43.7	1.000007	
88500.0	20.0	-5.1	30.6	588.3	90.6	46.4	1.000007	
89000.0	19.6	-4.8	29.9	588.7	91.3	42.9	1.000007	
89500.0	19.1	-4.5	29.1	589.1	92.0	28.2	1.000006	
90000.0	18.7	-4.2	28.5	589.5	90.0	13.6	1.000006	
90500.0	18.3	-3.8	27.6	589.9	14.7	2.2	1.000006	
91000.0	17.9	-3.5	27.1	290.3	240.7	2.4	1.000006	
91500.0	17.5	-3.2	26.5	290.0	269.0	3.1	1.000006	
92000.0	17.1	-2.9	25.9	291.2	282.9	4.1	1.000006	
92500.0	16.7	-2.6	25.3	291.0	270.0	4.5	1.000006	
93000.0	16.4	-2.2	24.7	292.1	271.4	5.1	1.000005	
93500.0	16.0	-1.3	24.0	292.2	260.9	5.6	1.000005	
94000.0	15.6	-0.4	23.4	294.4	23.4	1.000005		
94500.0	15.3	-0.5	22.8	295.0	22.8	1.000005		
95000.0	15.0	-0.6	22.2	296.7	21.7	1.000005		
95500.0	14.6	-1.7	21.7	297.0	21.7	1.000005		

STATION ALTITUDE 3989.60 FT. SL
20 MAY 02 0900 MDT
ASCENSIOIN NO. 223

MANDATORY LEVELS
14000000.0
WHITE SPOTS
32.40043 LAT DEG
106.57033 LONG DEG

TABLE 7

PRESURE, IN. OF MARS	GEO-POTENTIAL FEET	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	WIND DATA (KNOTS)
650.0	4962.	21.2	-5.0	329.3 4.2
600.0	6666.	16.5	-7.3	309.9 1.4
750.0	8450.	11.8	-9.3	287.3 0.2
700.0	10330.	9.6	-16.3	271.7 1.4
650.0	12327.	4.6	-20.1	247.0 2.6
600.0	14445.	-0.4	-20.1	231.4 2.9
550.0	16708.	-5.0	-27.0	246.1 10.7
500.0	19148.	-8.5	-31.0	294.0 10.9
450.0	21798.	-14.6	-35.4	276.0 1.4
400.0	24630.	-22.5	-41.3	276.7 11.5
350.0	27845.	-30.7	-48.1	265.4 1.2
300.0	31369.	-39.8	-55.3	272.6 12.6
250.0	35376.	-49.1		261.0 10.6
200.0	40061.	-56.4		280.9 1.6
175.0	42843.	-57.6		255.4 2.4
150.0	46024.	-59.2		268.7 0.2
125.0	49741.	-61.1		246.9 2.6
100.0	54280.	-63.4		299.7 9.6
80.0	58779.	-61.2		180.3 11.1
70.0	61514.	-59.9		255.0 12.0
60.0	64699.	-57.3		66.6 10.0
50.0	68490.	-56.0		124.0 0.2
40.0	73170.	-53.8		249.0 2.7
30.0	79287.	-49.0		267.7 12.2
25.0	83230.	-47.2		267.0 15.9
20.0	88097.	-45.1		267.0 45.9
15.0	94468.	-38.7		90.0

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3951.40 MSL
20 MAY 32
ASCENSION 40.
28 0800 MDT

STATION, 14 ICANHT (Lvs.), UAH
14000.00 U.S.
APACHE.

STATION COORDINATES
32° 6.4700 LAT L.G.
106.39352 LONG L.G.

TABLE-8

MEASUREMENT	DEGREE, DEC	TEMP, °A AIR	TEMP, °A WATER	REL. HUMID.
ILLIARDS	MSL F.E.E.T	DEGREES C	DEGREES C	PERCENT
879.0	5951.4	20.4	19.1	19.0
859.0	4918.7	16.9	-3.7	20.0
725.0	9298.0	9.0	-7.0	20.0
700.0	10280.9	8.5	-13.9	19.0
567.0	15637.2	-6.5	-23.5	21.0
534.2	17401.7	-6.3	-27.9	16.0
500.0	19091.6	-9.8	-30.6	16.0
400.0	24615.1	-22.9	-40.0	11.0
327.0	29301.4	-35.1	-59.0	6.0
300.0	31315.7	-39.8	-54.0	1.0
250.0	35335.1	-49.0		
228.2	37281.6	-54.0		
200.0	40052.7	-51.9		
182.2	41983.5	-60.2		
164.0	44160.8	-67.5		
150.0	46006.9	-69.3		
127.6	49296.3	-64.6		
109.4	52413.3	-62.0		
100.0	54742.4	-64.1		
77.0	59116.8	-64.7		
70.0	61451.4	-61.8		
65.6	62773.1	-61.6		
60.0	69621.1	-57.9		
50.0	68422.4	-57.4		
35.6	70753.4	-57.0		
30.0	79133.2	-52.1		
20.0	87090.4	-48.5		
15.5	93525.4	-41.9		

STATION ALTITUDE 3951.49 FEET
20 MAY 62 0800 MDT
ASCENS. 1.00 2.00

卷之三

STUDIO COOK, INC.
52-62700 LAF DUG
106-32352 LOR DUG

646

STATION AL11UUL 3451140 F611 MSL
20 MAY b2 0800 MOT
ASUNSIUN NO. 28

TABLE I
CONT'D

GEOPOTENTIAL ALTIMETER INSL FFL	PRESSUREL MILLIBARS	TEMPERATURE AIR DEGRES CELSIUS	WIND POINT MILES/HOUR	PRECIPIT. MM/HOUR	DEFL. CITY GLOBE MILES	STATE OF WIND DIRECTION KNOTS	WIND DIRECTION KNOTS				
25000.0	410.4	-20.2	-30.0	10.4	570.1	019.7	289.4	10.4	1.000111	1.000111	1.000111
24900.0	410.1	-21.4	-38.9	18.7	567.2	018.2	289.9	18.2	1.000112	1.000112	1.000112
24500.0	401.9	-2.5	-39.8	18.9	556.3	018.0	284.3	17.5	1.000121	1.000121	1.000121
25000.0	393.5	-3.8	-40.8	10.1	549.7	015.2	280.9	17.4	1.00012	1.00012	1.00012
25000.0	382.2	-75.1	-41.9	19.2	541.0	013.0	276.0	10.7	1.000112	1.000112	1.000112
26000.0	377.1	-26.4	-42.9	19.3	532.5	012.0	276.6	15.7	1.000111	1.000111	1.000111
26500.0	369.2	-27.7	-44.0	10.4	524.1	010.3	271.9	14.1	1.00011	1.00011	1.00011
27000.0	361.5	-29.1	-45.0	19.5	512.8	008.7	267.1	11.9	1.00010	1.00010	1.00010
27500.0	353.9	-30.4	-46.1	19.6	507.7	007.0	260.4	10.7	1.00010	1.00010	1.00010
28000.0	346.4	-31.7	-47.2	19.7	499.8	005.4	259.3	10.3	1.00010	1.00010	1.00010
28500.0	339.2	-33.0	-46.2	19.8	491.9	003.7	251.7	10.5	1.00011	1.00011	1.00011
29000.0	332.0	-34.3	-49.3	19.9	484.6	002.1	261.0	11.0	1.00010	1.00010	1.00010
29500.0	324.9	-75.6	-50.4	20.0	476.4	000.5	263.4	0.8	1.00010	1.00010	1.00010
30000.0	317.9	-36.9	-51.7	20.1	468.4	000.0	269.9	14.4	1.00010	1.00010	1.00010
30500.0	311.0	-37.9	-52.4	20.0	460.4	000.0	270.0	0.8	1.00010	1.00010	1.00010
31000.0	304.2	-39.1	-53.4	20.0	454.7	000.1	272.5	11.5	1.00010	1.00010	1.00010
31500.0	297.5	-40.2	-54.8	19.1	445.0	000.0	273.5	12.4	1.000099	1.000099	1.000099
32000.0	290.8	-41.5	-56.4	18.0	437.3	000.1	270.1	0.4	1.000098	1.000098	1.000098
32500.0	284.3	-42.7	-59.3	14.1	429.7	000.1	273.0	11.4	1.000097	1.000097	1.000097
33000.0	277.9	-43.9	-61.7	11.6	422.3	000.0	273.5	15.5	1.000096	1.000096	1.000096
33500.0	271.7	-45.1	-64.5	10.1	415.1	000.1	274.4	16.7	1.000095	1.000095	1.000095
34000.0	265.6	-46.3	-67.8	6.6	407.9	000.7	276.4	18.9	1.000094	1.000094	1.000094
34500.0	259.6	-67.6	-71.9	4.1	400.9	000.1	276.4	21.1	1.000093	1.000093	1.000093
35000.0	253.8	-68.8	-78.7	1.7	394.1	000.5	280.5	23.0	1.000092	1.000092	1.000092
35500.0	248.1	-69.1	-80.1	-	387.2	002.0	282.5	24.6	1.000091	1.000091	1.000091
36000.0	244.3	-61.1	-84.3	-	380.4	000.5	284.4	25.5	1.000090	1.000090	1.000090
36500.0	236.7	-1.2	-82.2	-	375.3	000.3	286.3	26.4	1.000089	1.000089	1.000089
37000.0	231.2	-3.3	-84.2	-	369.3	000.0	288.3	27.4	1.000088	1.000088	1.000088
37500.0	223.8	-4.2	-86.8	-	359.4	000.4	289.6	28.2	1.000087	1.000087	1.000087
38000.0	220.5	-4.8	-89.0	-	351.8	000.7	289.0	28.4	1.000086	1.000086	1.000086
38500.0	215.3	-5.3	-91.3	-	344.3	000.0	287.4	26.2	1.000085	1.000085	1.000085
39000.0	210.3	-5.8	-93.5	-	337.0	000.4	285.7	27.1	1.000084	1.000084	1.000084
39500.0	205.3	-6.3	-95.6	-	329.9	000.7	287.0	26.1	1.000083	1.000083	1.000083
40000.0	200.5	-6.8	-96.8	-	322.9	000.0	287.0	27.5	1.000082	1.000082	1.000082
40500.0	195.7	-7.7	-97.7	-	315.4	001.9	287.9	25.0	1.000081	1.000081	1.000081
41000.0	191.1	-8.8	-98.7	-	310.1	000.7	281.0	21.0	1.000080	1.000080	1.000080
41500.0	186.5	-9.4	-99.0	-	305.9	000.5	287.0	32.0	1.000079	1.000079	1.000079
42000.0	182.1	-0.2	-99.6	-	297.8	000.5	289.8	34.0	1.000078	1.000078	1.000078
42500.0	177.7	-9.6	-99.6	-	289.6	000.4	289.4	33.1	1.000077	1.000077	1.000077
43000.0	173.5	-58.9	-98.7	-	284.1	000.2	284.9	31.7	1.000076	1.000076	1.000076

** AT LEAST ONE ASSUMED TO LIVE WHICH IT VALUE AS ONE IN LIFE, INTERPOLATE, OR

STATION ALTITUDE 3451.00 FT. MSL
20 MAY 02 ASCENSION ISL.
28 0800 MDT

Upper Air Unit 18

TABLE-9 cont'd

GEOMETRIC ALTITUDE IN FEET	ATMOSPHERIC PRESSURE IN MILLIBARS	TEMPERATURE AT MERCURY DENSITY DEGREES CELSIUS	PET. HUM. PERCENT	DESIRED PRESSURE IN MM. THERMOMETER	DESIRED TEMPERATURE IN DEGREES CELSIUS	REFRACTIVE INDEX	WIND DATA	WIND DIRECTION IN DEGREES (TRUE)	WIND VELOCITY IN KNOTS	INDEX OF REFRACTION
4,5500.0	109.3	-58.3	100.3	267.7	571.0	29.9	201.4	20.9	1.0000101	1.0000000
44000.0	109.3	-57.7	100.3	267.4	571.0	27.7	200.5	27.7	1.0000000	1.0000000
44500.0	101.3	-48.0	101.3	261.2	571.4	25.3	200.0	25.3	1.0000050	1.0000050
45000.0	101.3	-47.4	101.3	255.9	570.4	24.7	200.5	24.7	1.0000050	1.0000050
45500.0	101.7	-48.8	101.7	250.7	569.4	24.1	200.3	24.1	1.0000050	1.0000050
46000.0	100.0	-49.5	100.0	245.0	569.4	22.3	200.6	22.3	1.0000050	1.0000050
46500.0	100.0	-49.0	100.0	240.3	567.0	20.9	200.9	20.9	1.0000050	1.0000050
47000.0	102.9	-41.6	102.9	235.2	566.0	19.6	200.3	19.6	1.0000052	1.0000052
47500.0	104.4	-42.3	104.4	230.4	565.6	18.6	200.6	18.6	1.0000051	1.0000051
48000.0	100.0	-42.9	100.0	225.4	564.2	19.3	200.7	19.3	1.0000050	1.0000050
48500.0	102.7	-43.6	102.7	220.0	564.0	20.3	201.0	20.3	1.0000049	1.0000049
49000.0	129.5	-44.2	129.5	212.9	562.1	21.8	200.2	21.8	1.0000048	1.0000048
49500.0	120.3	-44.4	120.3	210.9	562.0	23.3	200.1	23.3	1.0000047	1.0000047
50000.0	120.3	-44.0	120.3	205.5	563.4	24.4	200.9	24.4	1.0000046	1.0000046
50500.0	120.3	-43.6	120.3	199.9	564.0	25.7	201.4	25.7	1.0000045	1.0000045
51000.0	117.3	-43.2	117.3	194.7	564.1	26.4	202.0	26.4	1.0000045	1.0000045
51200.0	114.5	-42.8	114.5	189.5	566.1	27.2	201.1	27.2	1.0000042	1.0000042
52000.0	111.7	-42.3	111.7	184.0	565.0	26.6	200.6	26.6	1.0000041	1.0000041
52500.0	109.0	-42.1	109.0	179.0	566.0	30.0	200.0	30.0	1.0000040	1.0000040
53000.0	108.3	-42.7	108.3	176.0	566.2	30.6	200.3	30.6	1.0000039	1.0000039
53500.0	105.7	-43.2	105.7	172.1	566.4	30.8	202.4	30.8	1.0000038	1.0000038
54000.0	101.2	-43.8	101.2	160.4	565.7	29.9	204.0	29.9	1.0000037	1.0000037
54500.0	99.7	-44.1	99.7	164.0	565.0	27.1	204.0	27.1	1.0000037	1.0000037
55000.0	96.3	-44.2	96.3	160.6	565.2	25.4	203.9	25.4	1.0000036	1.0000036
55500.0	94.0	-44.2	94.0	156.7	565.2	14.6	200.2	14.6	1.0000035	1.0000035
56000.0	91.7	-44.3	91.7	152.9	565.0	10.7	199.8	10.7	1.0000034	1.0000034
56500.0	89.4	-44.4	89.4	149.4	565.9	5.7	198.0	5.7	1.0000033	1.0000033
57000.0	87.2	-44.4	87.2	145.0	565.9	9.9	195.4	9.9	1.0000032	1.0000032
57500.0	85.1	-44.5	85.1	146.1	565.8	12.1	195.7	12.1	1.0000032	1.0000032
58000.0	83.0	-44.5	83.0	139.0	565.7	10.2	199.6	10.2	1.0000031	1.0000031
58500.0	81.0	-44.6	81.0	135.3	564.6	9.1	199.0	9.1	1.0000030	1.0000030
59000.0	79.0	-44.6	79.0	134.0	564.3	9.7	197.0	9.7	1.0000029	1.0000029
59500.0	77.1	-44.7	77.1	126.9	564.3	12.2	197.4	12.2	1.0000028	1.0000028
60000.0	75.2	-44.8	75.2	125.4	564.4	13.2	196.9	13.2	1.0000027	1.0000027
60500.0	73.4	-45.2	73.4	121.7	564.5	13.3	197.3	13.3	1.0000026	1.0000026
61000.0	71.6	-45.5	71.6	116.4	564.7	12.5	189.0	12.5	1.0000025	1.0000025
61500.0	69.8	-45.8	69.8	115.1	564.4	10.0	194.4	10.0	1.0000024	1.0000024
62000.0	68.1	-46.1	68.1	112.3	564.5	7.7	175.7	7.7	1.0000023	1.0000023
62500.0	66.5	-46.2	66.5	109.3	564.1	6.6	166.0	6.6	1.0000022	1.0000022
63000.0	64.9	-46.2	64.9	105.2	564.7	2.7	175.0	2.7	1.0000021	1.0000021

ACQUILITI CONDUCIAIES,
32.02700 LA1 LG6
106.39352 LO1 DE6

INDEX OF THE MEMBERS OF THE FEDERATION OF THE PROVINCES OF CANADA

STATION AL11100L 3451.40 Ft. 1 MSL
20 MAY 62
ASCENSION ISL.
28 0800 MDT

Top of 0.1% D₅₀ A
1000000000
All 0.01%

W. O. O. T. I. C. C. O. O. R. O. U. L. A. E. S.

TABLE 9 cont'd

GEOMETRIC ALTITUDE IN MSL FEET	PRESSURE AT MILLIBARS	TEST-LITERATURE		REL. HUM. PERCENT	PRESSURE CUBIC MILLIBARS	SPEED OF WIND DATA METERS PER SECOND	WIND DIA- RATION DEGREES CENTIGRADE	WIND DIA- RATION DEGREES CENTIGRADE	WIND DIA- RATION DEGREES CENTIGRADE
		ATMOSPHERIC AIR DEPOINT	DEPOINT CENTIGRADE						
83500.0	24.5	-4.0-3			36.2	361.0	5.1	5.1	5.1
84000.0	23.9	-4.0-1			57.4	381.8	6.6	6.6	6.6
84500.0	23.4	-4.9-9			55.0	382.1	6.5	6.5	6.5
85000.0	22.9	-4.9-7			55.0	382.4	6.4	6.4	6.4
85500.0	22.3	-4.9-5			54.8	382.6	6.3	6.3	6.3
86000.0	21.8	-4.9-3			34.0	382.9	14.3	14.3	14.3
86500.0	21.3	-4.9-1			35.2	382.2	11.9	11.9	11.9
87000.0	20.8	-4.8-9			34.4	382.4	9.3	9.3	9.3
87500.0	20.4	-4.8-7			31.0	382.7	11.5	11.5	11.5
88000.0	19.9	-4.8-4			30.6	382.1	13.7	13.7	13.7
88500.0	19.5	-4.7-8			30.1	382.8	10.0	10.0	10.0
89000.0	19.0	-4.7-2			29.5	382.0	19.8	19.8	19.8
89500.0	18.6	-4.6-6			28.6	382.4	21.5	21.5	21.5
90000.0	18.2	-4.6-0			27.9	382.1	23.6	23.6	23.6
90500.0	17.8	-4.5-4			27.4	382.9	8.5	8.5	8.5
91000.0	17.4	-4.4-9			26.5	380.6	1.0	1.0	1.0
91500.0	17.0	-4.4-5			25.9	389.4	1.0	1.0	1.0
92000.0	16.6	-4.3-7			25.2	390.1	1.0	1.0	1.0
92500.0	16.2	-4.3-1			24.6	390.9	1.0	1.0	1.0
93000.0	15.9	-4.2-5			24.0	391.6	1.0	1.0	1.0
93500.0	15.5	-4.1-9			23.4	390.5	1.0	1.0	1.0

40000

STATION ALITUDE 3951.40 FEET MSL
20 MAY 62 0800 MDT
ASSEMBLY NO. 28

MAP, 100% L.L.
140000Z
APRIL
TABLE-10

STATION COORDINATES
52.02700 LAT LTG
106.39352 LONG LTG

PRESSURE MILLIBARS	GEOPOTENTIAL FLEET	TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TQ)	SPEED KNOTS
650.0	4915.	19.0	-5.7	20.	11.0
600.0	6614.	15.7	-4.9	24.	10.5
750.0	8395.	11.3	-6.0	20.	22.4
700.0	10271.	1.3	-13.9	282.	3.0
650.0	12261.	5.8	-17.2	29.	17.7
600.0	14374.	-1.1	-20.9	20.	23.0
550.0	16630.	-2.4	-25.7	15.	21.7
500.0	19065.	-9.6	-30.6	10.	27.5.
450.0	21761.	-15.9	-35.0	17.	18.9
400.0	24574.	-22.8	-40.0	19.	26.0
350.0	27734.	-31.1	-46.7	20.	20.7
300.0	31254.	-39.0	-54.0	20.	27.5.
250.0	35257.	-49.6	-61.3	14.	24.3
200.0	39457.	-56.9	-68.7	14.	27.6
175.0	42700.	-59.2	-70.4	260.	26.5
150.0	45094.	-60.3	-75.3	254.	22.3
125.0	49571.	-64.3	-76.0	267.	22.7
100.0	54076.	-66.1	-80.7	204.	20.7
80.0	58553.	-64.6	-81.2	101.	9.1
70.0	61241.	-61.6	-80.2	100.	10.4
60.0	64391.	-57.9	-78.5	70.	10.1
50.0	68166.	-57.4	-75.9	115.	11.3
40.0	72795.	-57.2	-75.2	131.	1.9
30.0	78796.	-52.1	-70.2	170.	9.5
25.0	82083.	-50.5	-68.2	20.	4.8
20.0	87479.	-48.5	-69.1	129.	0.2

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
20 MAY 52 0900 MDT
ASCENSION NO. 147

SIGNIFICANT LEVEL DATA
14,00010147
101. OMAJ
TABLE -1:

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR OF GRS. CENIGRADE	DEWPOINT PERCENT
874.7	4126.6	21.6	-5.9
873.7	4159.2	23.8	-4.4
858.8	4649.8	21.6	0.4
850.0	4942.1	20.6	4.4
820.0	5956.9	1.7	-1.2
700.0	10316.3	6.4	-0.9
686.3	10347.6	5.0	-6.1
653.9	12141.3	3.7	-15.0
618.5	13620.8	1.7	-1.2
584.7	15098.2	-2.4	-20.2
567.5	15878.0	-1.8	-20.1
500.0	19141.2	-9.7	-20.9
444.1	22111.3	-16.7	-32.9
400.0	24660.6	-23.8	-38.4
318.5	29983.0	-57.9	-50.2
300.0	31330.3	-41.4	-3.0
250.0	35322.1	-50.9	-2.0
226.6	37224.1	-54.8	-2.0
221.2	37917.4	-54.6	-2.0
208.0	39211.8	-55.5	-2.0
200.0	46631.4	-57.7	-2.0
179.4	42292.5	-57.6	-2.0
170.2	43389.4	-57.0	-2.0
150.0	45998.2	-61.6	-2.0
139.7	47450.2	-62.0	-2.0
127.4	49314.3	-65.5	-2.0
120.5	50439.1	-62.6	-2.0
111.4	52037.9	-62.2	-2.0
104.5	53356.0	-63.9	-2.0
100.0	54228.9	-62.6	-2.0
89.9	56605.7	-65.7	-2.0
81.1	58457.1	-63.5	-2.0
78.3	59176.8	-59.1	-2.0
70.0	61492.3	-59.8	-2.0
54.5	66676.2	-58.3	-2.0
56.0	68475.4	-56.5	-2.0
38.2	74159.1	-55.1	-2.0
36.0	79319.4	-48.5	-2.0
25.2	83116.2	-48.3	-2.0
21.1	87025.9	,3.7	-2.0

STATION ALTITUDE 4126.49 FT. T MSL
20 MAY 02 0900 MDT
ASCENSION NO. 147

SIGHT POINT 1400004,
HOLLIS, MA.
TABLE-11 cont'd

PRESSURE GEOMETRIC IN MILLIBARS MSL FELT	TEMPERATURE AIR C NEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
20.0	882.79	-39.5
17.4	91384.6	-39.3
14.9	94932.5	-35.4
11.7	100541.4	-32.8
10.3	103538.2	-29.1

GEODETIC COORDINATES
52.00000 LAT DLU
106.09965 LONG ECG

STATION ALTITUDE 4126.9 FT MSL
20 MAY 82 0900 MDT
ASCENSION NO. 147

UPPER AIR DATA
140014Z
OMAN
TABLE-12

STATION COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEC. HUM. G/KM/CUBIC METER	SLP INCHES (IN)	WIND DATA WIND DIRECTION WIND VELOCITY KNOTS	INFLUX OF REFRACTION
4126.9	874.7	21.8	-5.9	1031.4	069.0	300.0	1.0001247
4500.0	865.3	22.3	-9	1015.5	070.4	355.7	1.0001251
5000.0	848.5	20.5	4	1003.5	060.5	350.7	1.0001251
5500.0	835.4	19.6	-4	989.2	067.4	340.4	1.0001247
6000.0	818.7	18.6	-11.2	975.1	070.3	341.1	1.0001242
6500.0	804.0	17.2	-1.7	962.5	064.0	334.0	1.0001239
7000.0	789.5	15.8	-12.3	949.7	063.0	323.4	1.0001233
7500.0	775.3	14.3	-2.9	937.2	061.4	314.3	1.0001232
8000.0	761.4	12.9	-3.5	925.0	059.7	306.7	1.0001228
8500.0	747.7	11.5	-4.2	912.9	050.1	300.1	1.0001224
9000.0	734.3	10.1	-4.9	901.0	052.4	294.0	1.0001221
9500.0	721.1	8.7	-5.6	889.3	054.7	287.3	19.6
10000.0	708.1	7.3	-6.4	877.8	053.1	282.3	20.6
10500.0	695.2	5.9	-7.3	866.4	051.4	282.0	21.8
11000.0	682.4	4.8	-8.8	853.7	050.1	280.4	22.2
11500.0	669.0	4.3	-11.3	839.0	049.4	278.0	21.5
12000.0	657.4	3.8	-14.1	825.9	048.6	267.1	20.1
12500.0	645.1	3.2	-15.3	812.5	048.0	254.0	19.0
13000.0	633.1	2.5	-15.7	799.4	047.2	243.5	19.8
13500.0	621.3	1.9	-16.1	786.2	046.4	239.4	21.3
14000.0	609.6	1.6	-17.2	774.9	044.9	232.4	23.0
14500.0	598.2	1.7	-18.5	764.3	043.3	224.1	23.2
15000.0	586.9	2.1	-19.9	753.9	041.7	210.0	22.2
15500.0	575.8	2.1	-20.1	759.4	041.7	219.9	1.0001171
16000.0	564.8	2.1	-20.4	735.5	041.0	200.8	1.0001168
16500.0	554.0	2.3	-21.4	725.3	041.0	211.2	1.0001165
17000.0	542.3	4.5	-22.5	704.1	033.7	200.7	1.0001162
17500.0	532.9	5.7	-23.5	693.7	037.3	203.4	1.0001159
18000.0	522.6	6.9	-24.5	683.5	035.8	205.2	1.0001157
18500.0	512.6	8.1	-25.5	673.9	034.4	204.1	1.0001154
19000.0	502.7	9.4	-26.6	663.9	032.9	202.0	1.0001152
19500.0	492.9	10.5	-27.0	653.5	031.2	219.3	1.0001149
20000.0	483.2	11.7	-28.6	643.5	030.0	215.5	1.0001147
20500.0	473.6	12.9	-29.6	633.7	028.0	210.7	1.0001144
21000.0	464.2	14.1	-30.6	624.0	027.2	206.7	1.0001142
21500.0	455.1	15.3	-31.6	614.5	025.7	205.7	1.0001139
22000.0	446.1	16.4	-32.6	605.1	024.3	203.0	1.0001137
22500.0	437.1	17.8	-33.7	596.1	022.9	199.0	1.0001135
23000.0	428.2	19.2	-34.7	587.5	020.9	192.0	1.0001133
23500.0	419.5	20.6	-35.7	578.4	019.2	190.2	1.0001131

STATION ALTITUDE 4126.49 FT. + MSL
20 MAY 62 0900 MDT
ASCLMSSION NO. 147

UNPRED. AIR DATA
140001014/
HOLLOWAY

OUTPUT COORDINATES
32.68805 LAT deg
106.09965 LON deg

TABLE - 12 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMP NATURE AIR DEWPOINT DEGREES CELSIUS	REL.HUM. PERCENT	DENSITY GM/CM ³	SLANT OF SIGHT KNOTS	WIND DATA DIRECTION DEGREES (IN) <th><th>WIND DATA SPEED KNOTS</th><th>INDEX OF REFRACTION</th></th>	<th>WIND DATA SPEED KNOTS</th> <th>INDEX OF REFRACTION</th>	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	411.0	-22.0	-36.8	24.5	569.9	017.5	201.0	14.8	
24500.0	402.6	-23.4	-37.8	24.9	561.4	012.8	207.0	14.3	
25000.0	394.2	-24.7	-38.9	25.1	552.7	014.1	211.0	13.5	
25500.0	385.9	-25.0	-40.1	25.2	543.9	012.5	215.7	12.3	
26000.0	377.7	-27.3	-41.2	25.3	535.2	010.8	214.4	11.7	
26500.0	369.7	-28.7	-42.3	25.3	526.7	009.2	213.0	11.4	
27000.0	361.9	-30.0	-43.4	25.4	518.4	007.5	210.9	11.3	
27500.0	354.2	-31.3	-44.5	25.5	510.2	005.9	206.7	11.0	
28000.0	346.7	-32.6	-45.7	25.6	502.4	004.2	207.0	11.9	
28500.0	339.4	-34.0	-46.8	25.7	494.3	002.5	206.7	11.4	
29000.0	332.2	-35.3	-47.9	25.8	486.5	000.7	205.6	10.8	
29500.0	325.0	-36.6	-49.1	25.9	478.9	000.4	207.3	10.5	
30000.0	316.3	-37.9	-50.3	25.9*	471.3	000.2	206.3	10.2	
30500.0	311.3	-39.2	-50.3	16.0**	463.6	000.6	209.4	11.1	
31000.0	304.4	-40.5	-40.5	6.4**	455.9	004.2	209.9	12.0	
31500.0	297.7	-41.8	-41.8		448.3	002.6	209.9	13.6	
32000.0	291.0	-43.0	-43.0		440.4	001.0	210.5	15.5	
32500.0	284.4	-44.2	-44.2		432.7	000.5	212.1	16.2	
33000.0	276.0	-45.4	-45.4		425.1	000.0	214.6	20.8	
33500.0	271.0	-46.7	-46.7		417.7	000.4	217.9	22.5	
34000.0	265.6	-47.8	-47.8		410.4	004.9	218.3	24.2	
34500.0	259.6	-48.9	-48.9		403.3	003.3	218.9	24.6	
35000.0	253.7	-49.1	-49.1		396.2	000.0	219.5	1.000098	
35500.0	247.9	-51.3	-51.3		389.2	000.5	217.1	1.000096	
36000.0	242.2	-52.3	-52.3		381.9	000.2	215.6	1.000095	
36500.0	236.5	-53.3	-53.3		374.8	000.7	215.2	1.000095	
37000.0	231.0	-54.3	-54.3		367.0	000.3	214.7	1.000094	
37500.0	225.6	-54.0	-54.0		360.0	000.7	212.9	30.6	
38000.0	220.3	-54.8	-54.8		351.0	000.0	210.7	30.6	
38500.0	215.2	-55.1	-55.1		343.9	000.0	208.0	29.4	
39000.0	210.1	-55.4	-55.4		336.1	000.1	211.4	29.2	
39500.0	205.2	-56.3	-56.3		329.3	000.7	208.0	29.7	
40000.0	200.3	-57.6	-57.6		323.7	000.7	206.1	30.3	
40500.0	195.5	-57.7	-57.7		310.1	001.9	203.3	29.0	
41000.0	190.9	-57.7	-57.7		306.0	001.9	201.0	27.6	
41500.0	186.4	-57.6	-57.6		301.6	001.9	208.5	26.9	
42000.0	181.9	-57.6	-57.6		294.1	001.4	206.2	26.2	
42500.0	177.6	-57.5	-57.5		286.9	001.4	201.0	24.4	
43000.0	173.6	-57.6	-57.6		279.0	001.5	201.0	22.8	
43500.0	169.3	-57.2	-57.2		273.1	001.5	204.5	21.4	

** ALL LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
20 MAY 02 0900 MDT
ASCENSION 147 0900 MDT

UPPER AIR DATA
1400016147
HOLLOMAN
32.88865 LAT DEG
106.99905 LONG DEG

TABLE-12 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	SPEED OF WIND MILES PER HOUR	WIND DIRECTION IN DEGREES (IN) ROTATION	INDEX OF REFRACTION
44000.0	103.2	-58.1	267.0	571.3	242.0	20.3
44500.0	161.3	-59.0	262.3	570.2	245.0	19.8
45000.0	157.4	-59.8	257.1	569.0	47.7	19.4
45500.0	155.7	-60.7	252.0	567.8	55.7	19.0
46000.0	150.0	-61.6	247.0	566.6	60.0	18.2
46500.0	149.4	-61.7	241.4	566.4	74.4	15.8
47000.0	142.3	-61.9	235.5	566.3	89.3	16.0
47500.0	139.4	-62.1	230.0	566.0	92.5	16.3
48000.0	136.0	-63.0	225.4	564.7	79.3	16.8
48500.0	132.6	-64.0	220.9	563.4	70.4	17.4
49000.0	129.4	-64.9	210.5	562.2	98.4	18.7
49500.0	126.2	-65.0	210.3	562.0	61.7	20.2
50000.0	123.1	-65.7	204.9	562.0	50.1	22.1
50500.0	120.1	-66.2	196.0	562.0	50.1	24.0
51000.0	117.2	-62.5	193.8	562.5	50.5	25.6
51500.0	114.4	-62.3	189.0	562.0	61.0	26.6
52000.0	111.6	-62.2	184.3	562.8	65.6	27.7
52500.0	108.9	-62.8	180.3	562.0	60.1	26.3
53000.0	106.2	-63.5	176.0	562.0	60.0	24.8
53500.0	103.7	-63.7	172.4	562.4	59.5	21.5
54000.0	101.1	-62.9	167.0	564.6	71.1	17.1
54500.0	98.7	-63.0	165.5	564.8	72.3	12.7
55000.0	96.3	-63.6	160.0	562.0	67.7	8.0
55500.0	93.9	-64.3	156.0	562.4	57.0	4.9
56000.0	91.6	-64.9	153.2	562.2	12.9	4.4
56500.0	89.4	-65.6	150.0	561.2	108.2	6.4
57000.0	87.2	-65.2	148.1	561.7	182.0	8.9
57500.0	85.0	-64.6	142.1	562.1	187.7	11.0
58000.0	82.0	-64.0	139.4	562.4	191.4	13.2
58500.0	80.9	-63.2	134.3	564.4	194.3	14.9
59000.0	79.0	-60.2	129.2	565.0	170.0	16.5
59500.0	77.1	-69.2	123.5	569.0	190.7	13.5
60000.0	75.2	-59.3	122.0	569.0	195.7	9.1
60500.0	73.4	-59.5	119.0	569.4	187.4	4.8
61000.0	71.7	-59.7	117.0	569.2	114.5	2.0
61500.0	70.0	-59.8	114.3	569.0	54.5	5.5
62000.0	68.3	-59.7	111.3	569.2	73.0	6.7
62500.0	66.7	-59.5	108.7	569.4	85.0	6.6
63000.0	65.1	-59.4	105.1	569.0	10.0	1.000024
63500.0	63.5	-59.2	103.5	569.8	10.7	1.000023

STATION ALTITUDE 4126.59 FEET
20 MAY 32 0900 MDT
ASCENSION NO. 147

UPLR AIR CUA
14000144,
HOLLOWAY

WORLD COORDINATES
32.0885 LAT DEG
106.09965 LONG DEG

TABLE - 2 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	DEWPOINT CENTIGRADE	REL.HUM. PERCENT	REFRACT. INDEX	REFRACT. INDEX	REFRACT. INDEX
04000.0	62.0	-19.1		100.0	0.7000	0.24	1.0000
04500.0	60.5	-18.9		99.4	0.7002	0.24	1.0000
05000.0	59.1	-18.8		98.0	0.7004	0.24	1.0000
05500.0	57.7	-18.6		96.7	0.7006	0.24	1.0000
06000.0	56.3	-18.5		91.4	0.7008	0.24	1.0000
06500.0	55.0	-18.4		89.1	0.7010	0.24	1.0000
07000.0	53.7	-18.0		80.9	0.7100	0.24	1.0000
07500.0	52.4	-17.5		84.6	0.7200	0.24	1.0000
08000.0	51.2	-17.0		82.4	0.7300	0.24	1.0000
08500.0	49.9	-16.5		80.3	0.7400	0.24	1.0000
09000.0	48.8	-16.4		78.4	0.7500	0.24	1.0000
09500.0	47.6	-16.2		76.5	0.7550	0.24	1.0000
10000.0	46.5	-16.1		74.8	0.7590	0.24	1.0000
10500.0	45.4	-16.0		72.9	0.7740	0.24	1.0000
11000.0	44.3	-15.9		71.1	0.7790	0.24	1.0000
11500.0	43.3	-15.8		69.4	0.7744	0.24	1.0000
12000.0	42.3	-15.6		67.7	0.7740	0.24	1.0000
12500.0	41.3	-15.5		66.1	0.7747	0.24	1.0000
13000.0	40.3	-15.4		64.3	0.7749	0.24	1.0000
13500.0	39.4	-15.3		62.6	0.7750	0.24	1.0000
14000.0	38.5	-15.1		61.4	0.7756	0.24	1.0000
14500.0	37.6	-14.6		59.9	0.7759	0.24	1.0000
15000.0	36.7	-14.0		56.3	0.7767	0.24	1.0000
15500.0	35.9	-13.4		55.0	0.7760	0.24	1.0000
16000.0	35.0	-12.7		53.4	0.7764	0.24	1.0000
16500.0	34.2	-12.1		52.9	0.7769	0.24	1.0000
17000.0	33.4	-11.5		52.3	0.8001	0.24	1.0000
17500.0	32.7	-10.8		51.4	0.8009	0.24	1.0000
18000.0	31.9	-10.2		49.6	0.8047	0.24	1.0000
18500.0	31.2	-9.5		48.5	0.8046	0.24	1.0000
19000.0	30.5	-8.9		47.3	0.8034	0.24	1.0000
19500.0	29.8	-8.5		46.1	0.8029	0.24	1.0000
20000.0	29.1	-8.5		45.1	0.8040	0.24	1.0000
20500.0	28.4	-8.4		44.1	0.8040	0.24	1.0000
21000.0	27.8	-8.4		43.0	0.8040	0.24	1.0000
21500.0	27.1	-8.4		42.1	0.8041	0.24	1.0000
22000.0	26.5	-8.4		41.1	0.8041	0.24	1.0000
22500.0	25.9	-8.3		40.2	0.8041	0.24	1.0000
23000.0	25.3	-8.3		39.3	0.8042	0.24	1.0000
23500.0	24.8	-7.8		38.3	0.8043	0.24	1.0000

STATION LITTLER 426.59 FT. MSL
20 MAY 02 0900 MDT
ASCENSIO 140. 147

UPPER AIR DATA
1400010147
1001 GMAN

GEOMETRIC COORDINATES
32.0000 LAT DEC
106.09965 LON DEC

TABLE-12 cont'd

GEOMETRIC ALTITUDE HSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELSIUS	REF. HUM. DEGREES CELSIUS	REF. HUM. PERCENT	TYPE OF WIND	WIND DATA KNOTS	WIND DATA KNOTS (IN)	WIND DIRECTION DEGREES	WIND DIRECTION DEGREES (IN)	WIND DATA KNOTS	WIND DIRECTION DEGREES	WIND DIRECTION DEGREES (IN)	INDEX REFRACTION
84000.0	24.2	-47.3	37.3	585.5	159.0	9.8	1.000008						
84500.0	23.7	-46.7	36.4	586.3	163.8	8.8	1.000008						
85000.0	23.1	-46.1	35.5	587.0	174.0	8.1	1.000008						
85500.0	22.6	-45.5	34.6	587.8	183.2	6.6	1.000008						
86000.0	22.1	-44.9	33.7	588.6	198.1	5.2	1.000008						
86500.0	21.6	-44.3	32.9	589.4	210.7	4.2	1.000007						
87000.0	21.1	-43.7	32.1	590.1	227.2	3.0	1.000007						
87500.0	20.7	-42.0	31.1	592.4	250.1	2.0	1.000007						
88000.0	20.2	-40.3	30.2	594.3	290.4	1.5	1.000007						
88500.0	19.8	-39.7	29.3	595.1	328.9	1.9	1.000007						
89000.0	19.3	-39.5	28.6	595.9	349.0	2.7	1.000006						
89500.0	18.9	-39.4	26.2	595.6	11.4	1.9	1.000006						
90000.0	18.5	-39.4	27.6	595.6	67.4	1.5	1.000006						
90500.0	18.1	-39.4	27.0	595.7	106.5	2.4	1.000006						
91000.0	17.7	-39.3	26.4	595.7	150.2	3.3	1.000006						
91500.0	17.3	-39.2	25.8	595.9	108.5	5.1	1.000006						
92000.0	16.9	-38.6	25.2	596.2	176.1	7.2	1.000006						
92500.0	16.6	-38.1	24.6	597.3	178.5	9.8	1.000005						
93000.0	16.2	-37.5	24.0	598.0	179.9	12.4	1.000005						
93500.0	15.9	-37.0	23.4	598.7	183.2	14.0	1.000005						
94000.0	15.5	-36.4	22.8	599.4	188.0	14.0	1.000005						
94500.0	15.2	-35.9	22.3	600.1	192.4	15.7	1.000005						
95000.0	14.9	-35.4	21.8	600.7	197.4	16.1	1.000005						
95500.0	14.5	-35.1	21.3	601.0	200.6	16.3	1.000005						
96000.0	14.2	-34.9	20.8	601.3	204.4	16.5	1.000005						
96500.0	13.9	-34.7	20.3	601.6	208.1	15.9	1.000005						
97000.0	13.6	-34.4	19.9	601.9	212.3	15.2	1.000004						
97500.0	13.3	-34.2	19.4	602.2	217.2	14.5	1.000004						
98000.0	13.0	-34.0	19.0	602.5	220.4	12.8	1.000004						
98500.0	12.8	-33.7	18.6	602.8	240.0	12.0	1.000004						
99000.0	12.5	-33.5	18.2	603.1	256.1	11.2	1.000004						
99500.0	12.2	-33.3	17.8	603.4	259.2	8.6	1.000004						
100000.0	13.3	-34.2	17.4	602.2	262.2	6.0	1.000004						
100500.0	13.1	-34.0	17.0	603.7	229.3	4.7	1.000004						
101000.0	12.8	-32.8	16.6	603.9	237.0	5.2	1.000004						
101500.0	12.5	-32.2	16.2	605.5	224.5	6.2	1.000004						
102000.0	12.2	-31.6	16.0	605.5	15.4	1.000004							
102500.0	12.0	-31.0	15.6	605.5	15.4	1.000003							
103000.0	11.8	-30.4	15.4	607.0	15.1	1.000003							
103500.0	11.5	-29.8	15.1	607.8	14.7	1.000003							
104000.0	11.2	-29.1	15.0	608.3	14.7	1.000003							

STATION: ALASKA 9126-59 F-ET NSL
20 MAY 1962
ASSTNSLNUK 140. 147 0900 MDT

STANDARD PRESSURE LEVELS
14000, 1314,
HOLDING, 1000

STATION: COLDWATER
32.0000 LAT LEG
106.0000 LONG LEG

TABLE-13

PRESSURE MILLIBARS	GEODIENTIAL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR PRESSURE CENTIGRAB	RELATIVE PERCENT	WIND DIRECTION (EASTING)	WIND SPEED KNOTS
9939.	20.6	-9	26.	551.2	0.9	
606.0	6045.	16.8	-1.9	26.	321.2	11.9
750.0	8931.	11.8	-4.1	32.	300.9	17.6
700.0	10307.	6.4	-6.9	38.	282.1	21.3
656.0	12280.	3.5	-15.1	24.	259.9	19.4
600.0	14405.	-5	-18.3	24.	229.0	22.4
550.0	16673.	-3.8	-21.3	20.	275.2	17.1
500.0	19115.	-9.7	-26.3	20.	31.5	17.6
450.0	21752.	-15.9	-32.2	20.	261.0	10.0
400.0	24620.	-23.8	-38.2	20.	267.0	14.3
350.0	27768.	-32.1	-45.2	20.	267.0	11.6
300.0	31269.	-41.4	-51.4	20.	269.9	12.0
250.0	35246.	-50.9	-56.9	26.	265.2	12.6
200.0	39437.	-57.7	-57.7	26.	260.1	30.5
175.0	42702.	-57.3	-57.3	26.	250.7	23.5
150.0	45376.	-61.6	-61.6	26.	260.1	16.2
125.0	49559.	-64.5	-64.5	259.7	20.9	
100.0	53964.	-62.6	-62.6	271.9	12.3	
80.0	58543.	-61.8	-61.8	19.3	12.5	
70.0	61284.	-59.8	-59.8	20.3	2.0	
60.0	64451.	-58.9	-58.9	06.0	12.0	
50.0	68220.	-56.5	-56.5	146.2	4.9	
40.0	72878.	-55.3	-55.3	17.3	4.3	
30.0	78983.	-43.5	-43.5	30.5	0.9	
25.0	82921.	-40.1	-40.1	125.9	10.3	
20.0	87816.	-39.5	-39.5	305.4	1.6	
15.0	94300.	-35.6	-35.6	195.3	10.0	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.